Claims:

1. A method of producing a thermoelastic actuator assembly having desired operating characteristics including the steps of:

determining a desired negative pressure pulse characteristic for the actuator;

determining a heat dissipation profile corresponding to the desired negative pressure pulse characteristic; and

forming the thermoelastic actuator with a heat conduction means arranged to realize said profile.

2. A method according to claim 1, wherein the step of determining a desired negative pressure pulse characteristic includes a step of determining the physical qualities of a fluid to be used with the thermoelastic actuator.

3. A method according to claim 2, wherein the step of forming the thermoelastic actuator with a heat conduction means arranged to realize said profile includes forming one or more heat conductive layers in a passive bend layer of the actuator.